

CLAIMS:

1. An electro-acoustic apparatus (1) having a housing (2) with a housing wall (9) that is defined by an inner wall surface (16, 16A), and having an electro-acoustic transducer (17) that is arranged facing the inner wall surface (16, 16A), wherein the transducer (17) is provided and constructed to generate sound and to emit the generated sound in a sound output direction (13) right through a front chamber volume (31), and wherein inside the apparatus (1) a sound transmission volume (35) is provided, through which the generated sound channeled right through the front chamber volume (31) can be channeled at least partially in the sound output direction (13), and wherein in the housing wall (9) there is provided a sound outlet aperture (14, 15) running in the sound output direction (13) and arranged relative to the sound transmission volume (35) offset transversely to the sound output direction (13), and wherein between the sound transmission volume (35; 40) and the sound outlet aperture (14, 15) there is provided a sound guide channel (38, 39; 41), which runs substantially transversely to the sound output direction (13) and by means of which the sound transmission volume (35; 40) and the sound outlet aperture (14, 15) are acoustically connected and which forms an acoustic mass.
2. An apparatus (1) as claimed in claim 1, wherein two sound outlet apertures (14, 15) and just one sound transmission volume (35; 40) are provided, and wherein between the sound transmission volume (35; 40) and each sound outlet aperture (14, 15) there is provided a respective sound guide channel (38, 39; 41).
3. An apparatus (1) as claimed in claim 2, wherein each sound guide channel (38, 39; 41), viewed in the sound output direction (13), is constructed running in a curve.
4. An apparatus (1) as claimed in claim 1, wherein the sound guide channel (38, 39) and the sound transmission volume (35) are formed by means of a gutter-form recess (36, 37) and a cup-shaped recess (34) provided in the housing wall (9), both recesses opening out into the inner wall surface (16, 16A), and by means of an annular additional member (22) that lies acoustically tight against the inner wall surface (16, 16A) and acoustically tightly seals

the gutter-form recess (36, 37) and in which a sound transmission aperture (25) is provided for conducting the generated sound to the sound transmission volume (35).

5. An apparatus (1) as claimed in claim 4, wherein when the additional member (22) is in the form of an adhesive ring that is arranged between the housing wall (9) and the transducer (17) and which is provided for the purpose of mechanical connection of the transducer (17) to the housing wall (9).

10. An apparatus (1) as claimed in claim 4, wherein the additional member (22) in the form of an adhesive ring is provided in the region of its sound transmission aperture (25) with a sound-transmitting mesh (24), which by virtue of its construction forms a protection against dust.

15. An apparatus (1) as claimed in claim 4, wherein a ring seal (26) that is resiliently deformable at least in the sound output direction (13) is arranged between the additional member (22) and the transducer (17).